

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by:
Frough Sherwani

GENERAL INFORMATION:

Name: Dana Light Axle Manufacturing, LLC
Address: 10000 Business Boulevard
Dry Ridge KY 41035
Date application received: October 13, 2008
SIC/Source description: 3714 /Motors Vehicle parts & Accessories
AFS (10-digit) Plant ID: 21-081-00019
AI #: 4255
Activity Number: APE20080002
Permit number: F-06-012 R4

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
<input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not a major modification per 401 KAR 51:017, 1(23)(b) or 51:052 1(14)(b)	

MISCELLANEOUS:

☐ Acid rain source
☐ Source subject to 112(r)
☒ Source applied for federally enforceable emissions cap
☐ Source provided terms for alternative operating scenarios
☐ Source subject to a MACT standard
☐ Source requested case-by-case 112(g) or (j) determination
☐ Application proposes new control technology
☒ Certified by responsible official
☒ Diagrams or drawings included
☐ Confidential business information (CBI) submitted in application
☐ Pollution Prevention Measures
☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Existing Source (F-06-012R3):

POLLUTANTS	POTENTIAL EMISSIONS (TPY)	ACTUAL EMISSIONS¹ (TPY)	ALLOWABLE EMISSION (TPY)
Carbon Monoxide (CO)	9.59	1.09	NA
Nitrogen Oxides (NO_x)	11.43	1.3	NA
Sulfur Dioxide (SO₂)	0.069	0.0078	NA
PM10/PM	100.06	4.33	NA
VOC*	335.07	39.31	90.0
Toluene	11.511	1.551	9.0
Xylene**	1.34	0.94	NA
**Combined HAPs	12.8510	4.0553	22.5

Revision 4

POLLUTANTS	POTENTIAL EMISSIONS (TPY)	ACTUAL EMISSIONS¹ (TPY)	ALLOWABLE EMISSION (TPY)
Carbon Monoxide (CO)	-6.87	-0.799	NA
Nitrogen Oxides (NO_x)	-8.19	-0.95	NA
Sulfur Dioxide (SO₂)	-0.049	-0.0058	NA
PM10/PM	-58.5	-0.563	NA
VOC*	-167.85	-6.31	NA
Toluene	-11.059	-1.476	NA
Xylene**	20.36	-0.03	NA
**Combined HAPs	17.8510	0.9850	NA

Source Wide after Revision (F-06-012R4):

POLLUTANTS	POTENTIAL EMISSIONS (TPY)	ACTUAL EMISSIONS¹ (TPY)	ALLOWABLE EMISSION (TPY)
Carbon Monoxide (CO)	2.72	0.291	NA
Nitrogen Oxides (NO_x)	3.24	0.35	NA
Sulfur Dioxide (SO₂)	0.02	0.002	NA
PM10/PM	41.56	3.77	NA
VOC*	167.22	33.00	90.0
Toluene	0.452	0.075	9.0
Xylene**	21.7	0.91	NA
**Combined HAPs	22.152	0.985	22.5

* The source has accepted a facility-wide limit on annual VOC emission to no more than 90 tons. The actual VOC emissions shall be calculated based on 12-month rolling total.

** The source has accepted a facility-wide limit on annual single HAP emissions to no more than 9.0 tons and combined HAPS 22.5 tons. The actual HAPS emissions shall be calculated based on 12-month rolling total

SOURCE DESCRIPTION:

The DANA Torque-Traction Technology, Inc assembles lightweight vehicle axles used in vans, trucks, and sport utility at its facility at 10000 Business Blvd, Dry Ridge (Grant County), Kentucky.

The source operates several assembly lines, some of which have no air emissions. As part of some lines, the source paints the axles to inhibit corrosion during normal use. The source is currently operating four assembly lines that include painting as part of the process. The lines (200, 300, 400) use a water based coating that contains low levels of VOC. A fourth line (line 100) uses a VOC based coating. The source's current potential-to-emit calculations are well below major source thresholds, and the source is therefore a registered minor source. The source is planning an expansion of plant by incorporating four new process lines which are currently located at the source's Buena Vista, Virginia. These new lines will include paints booth that uses a VOC based – coating, as a result the source's potential-to-emit will exceed 100 tons per year of both VOCs and particulate matter, and 10 tons per year of for toluene (HAP). Operating records from Buena Vista plant indicates that actual emissions are below major source thresholds.

Therefore, On February 7, 2006, the source has applied to the Division for the conditional major permit.

MINOR PERMIT REVISION 4: UPDATING EMISSIONS UNITS:

On October 13, 2008, the Division received an application from the source for a minor revision to their conditional major permit F-06-012 R3.

The Dana Light Axle Manufacturing, LLC (Dana) facility, in Grant County, Kentucky is currently operating under Conditional Major, Construction/Operating Permit #F-06-012 R3. The permit was initially issued May 12, 2006 but has been revised since. Provisions for reporting commencement, startup, and attainment of the two paint booths, listed as EP-2 and EP-3 were outlined in the most recent revision on March 17, 2008.

On April 29, 2008 the source submitted a letter requesting an extension for the construction of paint booths for Lines 200 and 300. This construction was anticipated to commence in August 2008. At this time the installation is not feasible in the foreseeable future and the installation has been suspended indefinitely.

The source is requesting to review and clarify equipment and operations as well as suggest adjustments to Permit # F-06-012 R3 that would update the document to reflect current conditions.

The Flow coaters were originally permitted for Lines 200 and 300 with the associated aqueous wash operations. A change to paint booths for these lines was reflected in the first permit revision in August 2007. Flow coating operations currently exist at EP-2 (EU-50) and EP-3 (EU-35) and are recognized in this revised permit. Paint used by the flow coaters is the water based United Paint Black Waterborne Vinyl HW66-4601. This product is different than the VOC based Wilco Black Enamel that was anticipated to be used for the paint booths. Aqueous wash operations were assigned designations EP-2 (EU-02) and EP-7 (EU-07) for Lines 200 and 300, respectively.

Plans for touch up gun painting operations at Lines 100, 400, 500R, 950, and 975 have also

been cancelled. Touch up for these Lines will continue to utilize aerosol spray paint cans while touch up gun #1 has been installed on Line 200 and touch up guns #1 & #2 have been installed on Line 300. A total of three touchup guns are in operation at the source. Coating material used with the touch up guns will be consistent with the water based United Paint Black Waterborne Vinyl HW66-4601 used by flow coaters in Lines 200 and 300.

A dryer heater is used in conjunction with Line 300 coating operations. The equipment has identification EP-8 (EU-08). This equipment is not reflected in Permit #F-06-012 R3 and is recognized in this revised permit. Similarly, the dock door heaters are updated to reflect current conditions.

Line 500 operations have been removed and Line 600 (EU-39) operations mentioned in Section C – Insignificant Activities of Permit #F-06-012 R3 were never installed. These changes include exclusion of Line 500 from Section B Operation Conditions as well as EU-11 and EU-39 welding operations in Section C Insignificant Activities.

Current insignificant activities at the source consist of parts washers, puddle welders, and stopped bolt welders. Parts washers once numbered as many as twelve units, but now the source only have five parts washers. The Safety-Kleen Premium Gold used in parts washers is also applied to axles for surface cleaning activities. Safety-Kleen Heavy Duty Lacquer Thinner 6782 is used for paint gun clean up on lines 400, 500R, and 950. ARMAKLEEN M-301 and ARMAKLEEN Paint and Ink Remover are used for Lines 200 and 300 touch up gun cleaning. The Line 100 paint gun is cleaned with Loctite 30529 varnish remover. SIPA-31 is used in aqueous washes on the flow coaters. Throughputs and production line numbers associated with the emission units outlined in Section C – Insignificant Activities have been updated in this revised permit. Welding operations at this time include:

- 2 puddle welders at Line 100
- 1 puddle welder at Line 300
- 2 puddle welders at Line 400
- 2 puddle welders at Line 500R
- 2 puddle welders at Line 950 and
- 2 stopped bolt welders at Line 200

MINOR PERMIT REVISION 3: INSTALLATION OF TOUCH UP SPRAY GUNS.

On January 23, 2008, the Division received an application from the source for a minor revision to their conditional major permit F-06-012 R2.

There are six lines currently operating at the facility. The source is proposing to add a touchup spray guns to Emission Point # 2 (Line 200), Emission Point # 3 (Line 300), and Emission Point # 9 (Line 975). Emissions from the touchup operation will be fugitive into the plant. The axles will be air-dried.

On February 15, 2008, the Division received a name change application from “DANA Torque-Traction Technology, Inc” to “Dana Light Axle manufacturing, LLC”.

The current source wide emission limitations for VOC is 90 tons per rolling 12-month period, 9 and 22.5 tons per rolling 12-month period for single and combined HAPs respectively. These limitations will remain the same.

MINOR PERMIT REVISION 2: INSTALLATION OF TOUCH UP SPRAY GUNS

On October 9, 2007, the Division received an application from the source for a minor revision to their conditional major permit F-06-012 R1.

There are six lines currently operating at the facility. The source is proposing to add touchup spray guns to these six lines to eliminate the use of aerosol cans. There will be one gun used outside each paint booth area on Emission Point # 1(Lines 100), Emission Point # 2 (Line 200), Emission Point # 3 (Line 300), Emission Point # 5 (Line 400), Emission Point #6 (Line 500R) and Emission Point # 8(Line 950).

The Emission Point # 1(Lines 100), previously used a VOC-based coating (NPCA 1-84). The line currently uses a VOC-based coating (United Paint Black W/R Primer HW66-8713). This same paint will be used for the touch up operation.

Paint Lines 200, 300, 400, 500R and 950 will continue to be permitted using the VOC-based coating (Wilko 316.01). This same paint will be used for the touch up operation on these lines.

Emissions from the touchup operation will be fugitive into the plant. The axles will be air-dried.

The facility has also made a change to the paint gun cleaner. The new paint gun cleaner is Super 16 Paint Gun Cleaner.

The current source wide emission limitations for VOC is 90 tons per rolling 12-month period, 9 and 22.5 tons per rolling 12-month period for single and combined HAPs respectively. These limitations will remain the same.

MINOR PERMIT REVISION 1: INSTALLATION OF SPRAY BOOTHS

Revision 1 (Minor Revision):

On May 18, 2007, the source submitted a minor revision application to their conditional major permit F-06-012.

The source currently operates several assembly lines. As part of some lines, the facility paints the axles to inhibit corrosion during normal use. The plant is currently operating two flow coating lines (200 and 300) and four paint booths (100, 400, 500R, and 950). The source installed the latter lines as a part of a plant expansion in 2006.

The current source wide emission limitations for VOC is 90 tons per rolling 12-month period, 9 and 22.5 tons per rolling 12-month period for a single and combined HAPs respectively. These limitations will remain the same.

The source is proposing to remove two flow coater operations (Line 200 and 300) and replacing them with two (2) paint booths. Also, Line 600, that was a part of the original install, was never installed. However, this paint booth is now being installed in Line 300. The Line 300 upgrade is planned for mid May and the Line 200 install is planned for October 2007.